AF/1771

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Phillip E. WILSON et al Atty. Ref.: **1005-166**

Serial No. **08/715,724** Group: **1771**

Filed: **September 16, 1996** Examiner: **C. Juska**

For: **STAIN-RESISTANT POLYAMIDE FIBERS AND ARTICLES COMPRISING SAME**

* * * * * * * * * * * *

February 4, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO OFFICE COMMUNICATION

Sir:

This paper and the Brief attached hereto are being filed in response to the Office's Communication dated January 6, 2005, which set a nominal response due date of February 6, 2005. More specifically, the attached Brief has been revised and reformatted so as to address the criticisms advanced under 37 CFR §41.37(c).

Respectfully submitted,

NIXON & VANDERHYE P.C.

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APPLICANTS' APPEAL BRIEF

Sir:

This Appeal is from the Examiner's final rejection of claims 2, 3, 9 and 23, all of the claims presently pending herein.[1] As will become evident from the following discussion, the Examiner's rejections are in error and, as such, reversal of the same is solicited.

[1] The claims on appeal appear in the Claims Appendix accompanying this Brief.

INDEX TO BRIEF SECTIONS AND APPENDICES

I. Real Party In Interest

The real party in interest is the owner of the subject application, namely Honeywell International Inc.

II. Related Appeals and Interferences

A. The following continuation of the present application is presently on appeal and may therefore be deemed related to the appeal of the present application:

U.S. Application Serial No. 09/860,061 filed on May 17, 2001 (Attorney Docket No. 1005-196): Appeal Brief filed on September 20, 2004.

B. The following patent applications are also presently on appeal and may also be deemed related to the appeal of the present application:

U.S. Application Serial No. 10/175,064 filed on June 20, 2002 (Attorney Docket No. 1005-192): Notice of Appeal filed on June 30, 2004.

U.S. Application Serial No. 10/046,535 filed on January 16, 2002 (Attorney Docket No. 1005-188): Notice of Appeal filed on June 30, 2004.

U.S. Application Serial No. 10/059,364 filed on January 31, 2002 (Attorney Docket No. 1005-189): Notice of Appeal filed on June 30, 2004.

III. Status of Claims

A. The following claims are presently pending in this application: 2, 3, 9, 10 and 23.

B. The following claims have been rejected in the Examiner's "final" Official Action of June 17, 2004: Claims 2, 3, 9 and 23.

C. The following claims have been cancelled during prosecution to date: Claims 1, 4-8 and 11-22.

D. The following claim has not been rejected: 10[2]

E. The following claims have been allowed: None[3]

IV. Status of Amendments

An Amendment Under Rule 116 is being filed concurrently herewith so as to correct the dependency of claim 10 which the Examiner objected to under 37 CFR §1.75(c). In addition, the Amendment Under Rule 116 correct an obvious typographical error appearing in independent claim 2.[4]

V. Summary of Claimed Subject Matter

The present invention is directed toward an acid-dye and coffee stain resistant carpet comprising a backing material, and stain resistant sheath/core bicomponent face fibers with non-round cross-sections affixed in the backing material and bound thereto. (Page 6, lines 3-8) The face fibers are comprised of a core of a first polyamide component and a sheath component which occupies from about 3 to about 9 percent of the fiber and which is inherently chemically compatible with the first polyamide

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[2] Because claim 10 has not been rejected on the merits for art-based reasons, its status for purpose of appeal is not entirely clear. In this regard, claim 10 only attracted an objection pursuant to 37 CFR §1.75(c) which has been mooted by the concurrently filed Amendment Under Rule 116.

[3] In this regard, no specific claim has been indicated to be allowable by the Examiner. However, since all issues relating to claim 10 have been removed by the concurrently filed Amendment Under Rule 116, that claim may in fact be allowable (see footnote 2 supra) .

[4] Since such after-final Amendment relates merely to matters of form and reduces the issues on appeal, its entry for the purpose of this Brief has been presumed.

component and which has a concentration of titratable amino end-groups of less than 30 milliequivalents per kilogram (meq/kg), and advantageously less than 5 meq/kg. (Page 8, line 17 through page 9, line 2, page 9, lines 16-17 and page 11, lines 18-21). Importantly, the face fiber has a percent steam heatsetting shrinkage value which is about 70% or less of an otherwise identical fiber consisting of only the first polyamide component. (Page 15, lines 13-16.) The carpet having such face fibers will also exhibit an uncolored state having a red drink staining depth of less than 15 CIE ΔE units and a coffee staining depth of less than about 10 CIE ΔE units. (Page 10, lines 9-15 and Table II.)

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 2, 3, 9 and 23 stand "finally" rejected under 35 USC §103(a) as allegedly being unpatentable, from Lin (U.S. Patent No. 5,447,794) in view of Lijten et al (U.S. Patent No. 5,468,555), and in further view of Hoyt et al (U.S. Patent No. 5,340,886).[5]

VII. Arguments

Prior claims 2, 3, 9 and 23 attracted a rejection under 35 USC §103(a) based on Lin in view of Lijten et al and further in view of Hoyt et al. In essence, the Examiner's position appears to be that one of ordinary skill in this art would "obviously" employ the modified polyamide disclosed in Hoyt et al as the sheath of the bicomponent fibers disclosed in Lin.[6]

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[5] Two separate rejections have been advanced under 35 USC §103(a) based on the same combination of references, namely Lin in view of Lijten et al and further in view of Hoyt et al. In this regard, claims 2, 3 and 9 were the subject of one rejection while claim 23 alone was the subject of the other rejection. It appears that these rejections were separated simply because claim 23 was newly presented in the applicants' Amendment dated October 28, 2003. Thus, since the substance of the rejections are the same, they will be addressed jointly.

[6] Although no specific mention of the specific teaching in Lijten et al being relied upon by the Examiner was made in the final June 17, 2004 Official Action, applicant assumes that Lijten et al is being asserted for the teaching of multilobal fibers.

It is true that Lin discloses in Example 2 an amine end group content of about 50 gram equivalents per million grams of polymer for the core nylon 6,6 polymer. In this regard, the Examiner has conceded that the Board did not explicitly attribute the amine end group (AEG) concentration of about 50 meq/kg to the sheath polymer of Lin in the Board's decision of November 26, 2002 at page 7 thereof, which notes that:

> "Lin's example 2 [discloses that] the core is nylon 6,6, the sheath is nylon 6,12, and the concentration of titratable amino end groups is about 50 milliequivalents per kilogram...."

Thus factually, it is quite clear that Lin's Example 2 discloses the following:

(1) Lin's core polymer is nylon 6,6;

(2) Lin's sheath polymer is nylon 6,12; and

(3) the amino end group content that is disclosed is 50 meq/kg.

The Examiner concedes that Lin is "...silent with respect to an AEG concentration for the sheath polymer."[7] The Examiner asserts that Lin does teach an AEG concentration for the core which applicants do not dispute for the factual reasons noted previously. However, apparently based on the complete silence of Lin with respect to the sheath, and the therein disclosed ***HIGH*** AEG content of the core, the Examiner then concludes that an ordinarily skilled person would "obviously" to turn to ***LOW*** AEG polymers generally to employ as the sheath, and specifically the modified

[7] Official Action dated December 18, 2003 at page 3, line16.

polymer of Hoyt et al. With all due respect, however, such a position smacks of being made in the impermissible glare of hindsight.[8]

In this regard, the Board in its previous decision was of the view that that Lin did not suggest at all "...a sheath having less than 30 milliequivalents per kilogram of titratable amino end groups either by blocking amino end groups or by another method."[9] The Board is entirely correct on this point. That is, as noted above, the ***only*** disclosure of amino end group content in Lin of ***any*** polymeric component is 50 meq/kg. That such disclosure however is attributable to the core polymer -- ***not*** the sheath polymer -- does not affect the suggestions that Lin provides to ordinarily skilled persons in this art . Specifically, the "teaching" provided by Lin is essentially that amino end group contents are not important at all, and even if they were, Lin only discloses high amino end group contents of 50 meq/kg.

The Examiner takes issue with this latter point in her final rejection of June 17, 2004 by asserting that an ordinarily skilled person would have turned to Hoyt et al's low AEG sulphonated polymer as the sheath component in Lin's fiber. However, this respectfully puts the cart before the proverbial mule. That is, before one would be directed to low AEG polymers, one would need to recognize that, in the context of a ***bicomponent fiber***, a sheath component of ***low*** AEG polymers would at all be helpful. As noted above, Lin actually is indifferent to the AEG content in the sheath component as Lin is completely silent with respect to the same. Lin does, however, note that ***high*** AEG polymer may be employed for the core component to achieve a bicomponent fiber which is resistant to staining. Moreover, such a disclosure in Lin is made with the

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[8] The Federal Circuit regards hindsight as an insidious and powerful phenomenon and is a tempting, but forbidden zone in the inquiry of addressing the statutory obviousness standard. *See, e.g., Panduit Corp. v. Dennison Mfg. Co.,* 227 USPQ 337 (Fed. Cir. 1985) *and Loctite Corp. v. Ultraseal Ltd.,* 228 USPQ 90, 98 (Fed. Cir. 1985).

[9] See the Board's Decision of November 21, 2002 in USSN 08/715,724 at page 7, penultimate line bridging page 8.

assertion that such a fiber is stain resistant. In other words, Lin does not ascribe any significance at all to the AEG content of the sheath polymer vis-à-vis the resulting stain resistance properties of the fiber. On balance therefore, applicants still maintain that one would not turn to Hoyt et al in the first instance.

In any event, the Examiner has apparently overlooked the requirement of claim 23 that the sheath component be substantially sulphonate free. Hence, even if an ordinarily skilled person would turn to Hoyt et al, the subject matter of claim 23 would not be met due to Hoyt et al's disclosure of the necessity of sulphonated polymers coupled with low AEG content to provide acid-dye resistance.

As briefly discussed above, an ordinarily skilled person cannot ascertain the amino end group content of the sheath polymer employed in Lin since it is not expressly disclosed therein. Nor could an ordinarily skilled person ascertain the amino end group content of the sheath polymer even if such a person wanted to since the particular sheath polymer disclosed (i.e., duPont's Engineering Resin FE3643) does not appear to be commercially available.[10] Thus, the ordinarily skilled person is left only with what Lin explicitly discloses – that is, that the core polymer has an amino end group content of 50 meq/kg. In terms of amino end group contents, therefore, the suggestion of Lin is that high – not low – amino end group contents are present. In other words, Lin does not and cannot direct one of ordinary skill in this art to the low amino end group contents defined by the present applicants' claims.

The Examiner dismisses the Blackwell Declaration as not providing any evidence of unobviousness. However, how can a direct comparison be made with a fiber disclosed in Lin when an ordinarily skilled person is not enabled by Lin's disclosure with respect to the particular sheath polymer disclosed in the first place? One clearly

[10] See attached Declaration of Robert H. Blackwell which states, *inter alia*, that no information pertaining to the sheath polymer disclosed in Lin could be located by conducting internet searches.

cannot. The point of course with respect to presentation of the Blackwell Declaration is to affirm that one could not select the specific nylon 6,12 polymer disclosed in Lin. Instead, as noted previously, the real teaching of Lin is that the AEG concentration of the sheath polymer is of no importance at all. Thus, at most Lin's disclosure makes it a speculative exercise to select any particular nylon 6,12 polymer.

To summarize therefore, that chemical blocking agents may be employed for sulphonated polyamides as disclosed in Hoyt et al does not cure the deficiencies of Lin. Specifically, as noted previously, Lin does not provide any motivation for an ordinarily skilled person to select low amino end group content polymers generally. That the Examiner suggests the motivation for employing the polymer of Hoyt et al would "further enhance the Lin fiber's resistance to acid-dyes" amounts to clearly erroneous speculation which has uniformly been condemned by the reviewing Courts.[11]

In any event, Hoyt et al teaches such amino end group blocking is accomplished for *sulphonated* polyamides, and not essentially sulphonate-free polymers – i.e., as defined in applicants' claim 23.

Finally, an ordinarily skilled person would glean no motivation from any of the applied references with respect to the bicomponent face fibers having a percent steam heatsetting shrinkage value which is about 70% or less of a percent steam heatsetting shrinkage value of an otherwise identical fiber consisting of only the first polyamide component. Thus, there is clearly no motivation or suggestion provided by Lin, Lijten et al and/or Hoyt et al that would direct an ordinarily skilled person to expect that exceptional heatsetting shrinkage values would or could be obtained by a bicomponent fiber in accordance with the present applicants' claims.

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[11] *See, In re Katzaschmann*, 146 USPQ 66 (CCPA 1965).

Therefore, on balance, one of ordinary skill in this art would not be lead in the first instance by Lin to employ low amino end group content sheath polymers and thus, the combination of Lin, Lijten et al and Hoyt et al appears to be based improperly on the present applicants' disclosure.

The Examiner's rejections of record are in error and must be reversed. Such favorable action is solicited.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

2. An acid-dye and coffee stain resistant carpet comprising:

a backing material; and

stain resistant sheath/core bicomponent face fibers with non-round cross-sections affixed in said backing material and bound thereto;

said face fibers comprising: a core of a first polyamide component; and a sheath occupying from about 3 to about 9 percent of the fiber and substantially or completely covering said core, said sheath comprising a second polyamide component which is inherently chemically compatible with said first polyamide component, said second polyamide component comprising at least one stain resistant polyamide polymer selected from the group consisting of:

(a) $[NH\text{-}(CH_2)_x\text{-}NH\text{-}CO\text{-}(CH_2)_y\text{-}CO]_n$

where x and y may be the same or different integers from about 4 to about 30, the sum of x and y is greater than 13, and n is greater than about 40; and

(b) $[NH\text{-}(CH_2)_z\text{-}CO]_m$

where z is an integer from about 9 to about 30 and m is greater than about 40;

(c) derivatives of (a) or (b) including polymers substituted with one or more sulphonate, halogenate, aliphatic or aromatic functionality; and

(d) copolymers and blends of (a), (b) and (c);

wherein said fiber has a percent steam heatsetting shrinkage value which is about 70% or less of a percent steam heatsetting shrinkage value of an otherwise identical fiber consisting of only said first polyamide component; and

said carpet in an uncolored state having a red drink staining depth of less than 15 CIE ΔE units and a coffee staining depth of less than about 10 CIE ΔE units, and

wherein said inherently compatible polyamide component has a concentration of titratable amino end-groups less than 30 milliequivalents per kilogram.

3. The carpet of claim 2, wherein said concentration of titratable amino end-groups in said second polyamide polymer is less than 5 milliequivalents per kilogram.

9. The carpet of claim 3 wherein said core component has an amino end-group concentration between 5 and 100 milliequivalents per kilogram.

10.[12] The carpet of claim 2 wherein said core component has an amino end-group concentration between 20 and 50 milliequivalents per kilogram.

23. The carpet of any one of claims 2, 3, 9 or 10, wherein said second polyamide component is substantially sulfonate-free.

[12] As noted previously in footnote 2 supra., the status of claim 10 vis-à-vis this appeal is uncertain. It is therefore merely included in this section since it is also pending along with appealed claims 2, 3, 9 and 23.

IX. EVIDENCE APPENDIX

Evidence Description	Statement re Record Entry
"Declaration of Robert H. Blackwell" – Demonstrates that no information pertaining to the sheath polymer disclosed in the applied Lin reference could be located after conducting reasonable internet searches	Submitted concurrently as a part of and entered into the record with the Amendment dated October 28, 2003.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

COPY

Philip E. WILSON et al — Atty. Ref.: 1005-196

Serial No. 09/860,061 — Group: 1771

Filed: May 17, 2001 — Examiner: Jessica

For: STAIN RESISTANT POLYAMIDE FIBERS AND ARTICLES

. . . . . .

Honorable Commissioner of Patents
and Trademarks
Washington, DC 20231

DECLARATION OF ROBERT H. BLACKWELL

Sir:

The undersigned, ROBERT H. BLACKWELL, hereby declares and states as follows:

1. I am currently and, for all times relevant to the facts stated herein, have been employed by the owner of the above-identified application, Honeywell International Inc. ("Honeywell"), and its predecessor in interest BASF Corporation ("BASF").

2. I am familiar with the above-identified application and with U.S. Patent No. 5,447,794 to Lin (hereinafter "the Lin '794 patent") assigned to E.I. du Pont de Nemours and Company ("du Pont").

3. I am aware that in Example 2 of the Lin '794 patent a nylon 6,12 sheath polymer is disclosed as Engineering Resin FE3643 said to be available from du Pont

(hereinafter more simply as "the disclosed du Pont sheath polymer"). I have recently attempted to locate publicly available information pertaining to the disclosed du Pont nylon 6,12 sheath polymer by conducting internet searches. Although I did locate two product references on duPont web sites pertaining to nylon 6,12, neither product reference mentioned either Engineering Resin FE3643 specifically, or bicomponent carpet fibers generally. In this regard, one of the duPont product references that was located during my internet searches related to fibers for making toothbrush bristles, while the other related to duPont's engineered plastics marketed under the trademark ZYTEL PA.

4. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully Submitted,

July 23 2003
Date Signed

Robert H. BLACKWELL

X. RELATED PROCEEDINGS APPENDIX

BPAI Decision dated November 21, 2002 in the subject U.S. Application Serial No. 08/715,724

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The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PHILLIP E. WILSON, STANLEY A. MCINTOSH AND MATTHEW B. HOYT

Appeal No. 2001-2386
Application 08/715,724

ON BRIEF

Before PAK, OWENS and LIEBERMAN, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from the refusal to allow claims 2-4, 9, 10, 14, 15, 17, 20 and 21, which are all of the claims remaining in the application.

THE INVENTION

The appellants claim an acid-dye and coffee stain resistant carpet having fibers made of a polyamide core substantially or completely covered by a sheath of a specified polyamide.

Claims 20 and 2 are illustrative:

20. An acid-dye and coffee stain resistant carpet comprising:

a backing material; and

stain resistant sheath/core bicomponent face fibers with non-round cross-sections affixed in said backing material and bound thereto;

said face fibers comprising: a core of a first polyamide component; and a sheath occupying from about 3 to 9 percent of the fiber and substantially or completely covering said core, said sheath comprising a second polyamide component which is inherently chemically compatible with said first polyamide component, said second polyamide component comprising at least one stain resistant polyamide polymer selected from the group consisting of:

(a) $[NH-(CH_2)_x-NH-CO-(CH_2)_y-CO]_n$

where x and y may be the same or different integers from about 4 to about 30, the sum of x and y is greater than 13, and n is greater than about 40; and

(b) $[NH-(CH_2)_z-CO]_m$

where z is an integer from about 9 to about 30 and m is greater than about 40;

(c) derivatives of (a) or (b) including polymers substituted with one or more sulfonate, halogenate, aliphatic or aromatic functionality; and

(d) copolymers and blends of (a), (b) and (c);

wherein said fiber has a percent steam heatsetting shrinkage value which is about 70% or less of a percent steam heatsetting shrinkage value of an otherwise identical fiber consisting of only said first polyamide component; and

said carpet in an uncolored state having a red drink staining depth of less than 15 CIE ΔE units and a coffee staining depth of less than about 10 CIE ΔE units.[1]

2. The carpet of claim 20, wherein said inherently compatible polyamide component has a concentration of titratable amino end-groups less than 30 milliequivalents per kilogram.

THE REFERENCES

Lin	5,447,794	Sep. 5, 1995
Lijten et al. (Lijten)	5,468,555	Nov. 21, 1995

THE REJECTION

Claims 2-4, 9, 10, 14, 15, 17, 20 and 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lin in view of Lijten.

OPINION

The aforementioned rejection is affirmed as to claims 4, 14, 15, 17, 20 and 21, and reversed as to claims 2, 3, 9 and 10.

The appellants state that the claims stand or fall in two groups: 1) claims 4, 14, 15, 17, 20 and 21, and 2) claims 2 and 3

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[1] The examiner and the appellants should address whether the appellants' disclosure of percent sheath upper limits of about 15 wt%, about 30 wt% and about 90 wt% (specification, page 8, line 17 - page 9, line 2) provides adequate written descriptive support for the upper limit of about 9 percent recited in the appellants' claim 20.

(brief, page 5).[2] The rejection is affirmed only as to the claims in the first group. We limit our discussion of the rejection of the claims in the first group to one claim, i.e., claim 20. *See In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997).

Rejection of claim 20

Lin discloses an acid-dye and coffee stain resistant carpet (col. 1, lines 7-10; col. 2, lines 52-56; col. 6, lines 20-22) comprising a backing material tufted with stain resistant sheath/core bicomponent face fibers (col. 1, lines 7-9; col. 2, lines 54-56). The weight ratio of the sheath to the core can be 10:90 (col. 1, lines 41-42). Hence, the fiber can be 10 wt% sheath, which either falls within the about 9% recited in the appellants' claim 20 or is sufficiently close to about 9% that it would have fairly suggested, to one of ordinary skill in the art, that amount of sheath. *See Titanium Metals Corp. v. Banner*, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985). The face fibers comprise a core of a first polyamide component which can be nylon 6 or nylon 6,6 (col. 1, lines 39-40), which are the

[2] Claim 9, which depends from claim 3, and claim 10, which depends from claim 9, and which are omitted from the appellants' grouping of claims, are considered to stand or fall with the claims in the second group.

appellants' most preferred core polyamides (specification, page 9, lines 19-20), covered by a sheath which can be nylon 6,12 (col. 1, lines 43-47), which is the appellants' most preferred sheath polyamide (specification, page 11, line 17). Because Lin's nylon 6, nylon 6,6 and nylon 6,12 are the same polyamides as those of the appellants, they necessarily have the compatibility, percent steam heatsetting shrinkage and staining depth recited in the appellants' claim 20. "Products of identical chemical composition can not have mutually exclusive properties." *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Lin states that the fibers can be substantially eccentric (col. 2, lines 14-19), which indicates that they can be non-round. Moreover, Lijten teaches that carpet fibers having a trilobal cross-section, which is the appellants' preferred fiber cross-section (specification, page 14, line 10), are preferred due to their visual effect and properties such as adhesivity (col. 3, lines 16-21). Although round fibers are used in Lin's examples (col. 5, line 21), the reference does not limit the fiber cross-section to one which is round. Hence, one of ordinary skill in the art would have been led by Lijten to use trilobal cross-section fibers in Lin's carpet to obtain the

benefits of trilobal cross-section fibers disclosed by Lijten.

We therefore conclude that the carpet recited in the appellants' claim 20 would have been *prima facie* obvious to one of ordinary skill in the art over the applied prior art.

The appellants argue that the improved dyeability provided by Lijten's sheath (col. 4, lines 12-13) is diametrically opposed to the objective of Lin (brief, page 9). Lijten's disclosure, however, of the benefits of trilobal fibers in carpet (col. 3, lines 16-21), is applicable to trilobal fibers generally, regardless of whether a sheath on the fibers is dyeable or dye resistant.

The appellants argue that the claimed carpet provides surprising results with respect to heatset shrinkage and stain resistance (brief, pages 11-12). This argument is not well taken because the appellants have not provided a side-by-side comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims, and explained why the results would have been unexpected by one of ordinary skill in the art. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983); *In re*

Clemens, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980); *In re Freeman*, 474 F.2d 1318, 1324, 177 USPQ 139, 143 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972).

For the above reasons we conclude that the carpet claimed in the appellants' claim 20 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

Rejection of claims 2, 3, 9 and 10

The examiner argues that because Lin's nylon 6, nylon 6,6 and nylon 6,12 are the same as those used by the appellants, the fibers of Lin and the appellants inherently have the same number of titratable amino end groups, i.e., less than 30 milliequivalents per kilogram (answer, page 8). Lin's example 2, wherein the core is nylon 6,6, the sheath is nylon 6,12, and the concentration of titratable amino end groups is about 50 milliequivalents per kilogram (col. 5, lines 6-8 and 14-15), indicates that the examiner is incorrect. The appellants obtain their level of titratable amino end groups by reacting amino end groups with blocking agents (specification, page 11, line 18 - page 13, line 15). The examiner has not established that the applied prior art discloses, or would have fairly suggested to one of ordinary skill in the art, providing a sheath having less than 30 milliequivalents per kilogram of titratable amino end

groups either by blocking amino end groups or by another method. The examiner, therefore, has not carried the burden of establishing a *prima facie* case of obviousness of the carpet recited in the appellants' claim 2 and claims 3, 9 and 10 which depend directly or indirectly therefrom.

DECISION

The rejection of claims 2-4, 9, 10, 14, 15, 17, 20 and 21 stand rejected under 35 U.S.C. § 103 over Lin in view of Lijten is affirmed as to claims 4, 14, 15, 17, 20 and 21, and reversed as to claims 2, 3, 9 and 10.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

CHUNG K. PAK
Administrative Patent Judge

TERRY J. OWENS
Administrative Patent Judge

PAUL LIEBERMAN
Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES